

IN THE SPECIFICATION:

Please insert the following at the beginning of page 3 of the specification before the other text on that page:

Capacitance between two electrical conductors is a property that is measured by the amount of separated charge that can be stored on the conductors per unit change of voltage between the conductors. Capacitance in electric circuits is deliberately provided by a device called a capacitor. A capacitor is two electrodes, often called "plates" for historical reasons, of conducting material electrically insulated from each other and separated by a dielectric. Any two members made of conducting material (herein called electrodes) and insulated from each other operate as a capacitor and technology for measuring the properties of a capacitor may be applied thereto.

Except for the leakage (usually small) through the dielectric, no current flows through a capacitor (i.e. from electrode to electrode) when it is subject to a constant voltage. Alternating current will pass readily, however, and is called displacement current.

When alternating voltage is applied between the electrodes of a capacitor there is energy loss in the capacitor. One measure of the loss is the Q or "quality factor" of a capacitor, which is 2π times the ratio of the maximum energy stored to the energy dissipated during one cycle of the voltage applied to the capacitor. Other measures of the loss are the "power factor" and "dissipation factor" which are interrelated by the expressions presented below. Both the capacitance and the Q of a capacitor are strongly influenced by the dielectric.